

CLAIMS

What is claimed is:

1. A bread maker comprising: a main body divided into an oven compartment and a component compartment; upper and lower kneading drums which are rotatably provided at upper and lower parts inside of the oven compartment and wind opposite ends of a mixing bag filled with raw materials for bread; and a drum driving part placed in the component compartment to rotate the upper and lower kneading drums, the drum driving part comprising:

a driving motor generating a driving force to rotate the lower kneading drum;

a reduction gear which speed-reduces the driving force of the driving motor and has an output shaft thereof transmitting the speed-reduced driving force to the lower kneading drum;

a connector connecting the output shaft and the lower kneading drum;

upper and lower pulleys rotatably connected to the upper and lower kneading drums, respectively;

a driving belt connected to the upper and lower pulleys to rotate the upper and lower kneading drums; and

an engager connecting one side of the lower pulley to the connector.

2. The bread maker according to claim 1, wherein the engager comprises a plurality of engaging projections projected in a radial direction relative to an axis of the output shaft on an outer surface of the connector; and

a plurality of projections accommodating grooves formed in the lower pulley to accommodate the plurality of engaging projections.

3. The bread maker according to claim 2, wherein three engaging projections are uniformly distributed on the outer surface of the connector.

4. The bread maker according to claim 2, wherein the reduction gear includes a worm connected to a shaft of the driving motor and a worm wheel engaged with the worm, and a gear case accommodating the worm and the worm wheel.

5. A driving mechanism, comprising:

a driving motor generating a driving force to rotate a first drum;

a reduction gear controlling the driving force of the driving motor coupled to an output shaft transmitting the driving force to the first drum;
a connector connecting the output shaft and the first drum;
a first pulley rotatably connected to the first drum;
a second pulley rotatably connected to a second drum;
a driving belt connected to the first and second pulleys to rotate the first and second drums; and
an engager connecting one side of the first pulley to the connector.

6. The drum driving mechanism according to claim 5, wherein the engager includes a plurality of engaging projections projected in a radial direction relative to an axis of the output shaft on an outer surface of the connector and a plurality of projections accommodating grooves formed in the first pulley to accommodate the engaging projections.

7. The drum driving mechanism according to claim 6, wherein at least one engaging projection is located on the outer surface of the connector.

8. The drum driving mechanism according to claim 6, wherein the reduction gear further includes a worm connected to a shaft of the driving motor and a worm wheel engaged with the worm, and a gear case accommodating the worm and the worm wheel.

9. A bread maker comprising an oven compartment and a component compartment, wherein the component compartment further comprises a drum driving mechanism, the drum driving mechanism including:

a driving motor rotating a first kneading drum;
a reduction gear controlling the number of rotations of the driving motor;
a connector connecting an output shaft of the reduction gear and connecting a first driving shaft part of the first kneading drum;
a second pulley rotatably coupled to a second driving shaft part of a second kneading drum;
a first pulley rotatably coupled to the first driving shaft part of the first kneading drum;
and
a driving belt coupled to the first and second pulleys and rotating the first and second kneading drums.

10. The bread maker according to claim 9, wherein a driving force generated by the driving motor is used to rotate the first kneading drum and transmitted to the first driving shaft part of the first kneading drum connected to the output shaft and the connector by the reduction gear located in a first part of the driving motor.

11. The bread maker according to claim 9, wherein the reduction gear further comprises a worm gear set having a worm and a worm wheel in a gear case located under the driving motor.

12. The bread maker according to claim 11, wherein the worm is coupled to an end of a driving motor shaft, and the worm wheel is coupled to the output shaft which is connected to the driving shaft part of the first kneading drum by the connector and engaged with the worm.

13. The bread maker according to claim 12, wherein one side of the connector is connected to the output shaft having the worm wheel and a other side of the connector is connected to the first pulley rotatably connected to the driving shaft part of the first kneading drum.

14. The bread maker according to claim 13, wherein the connector transmits the driving force from a motor by the reduction gear to the first kneading drum.

15. The bread maker according to claim 9, further comprising an engager provided between the connector and the first pulley.

16. The bread maker according to claim 15, wherein the engager further includes a plurality of engaging projections projecting in a radial direction on an outer surface side of the connector, and a plurality of projections accommodating grooves provided at corresponding positions of the first pulley to accommodate the engaging projections of the connector.

17. The bread maker according to claim 16, wherein the plurality of engaging projections are projected in a radial direction relative to an axis of the output shaft on the outer surface of the connector.

18. The bread maker according to claim 16, wherein the plurality of projections accommodating grooves of the first pulley are distributed in a radial direction relative to an axis of the output shaft and match the engaging projections.